

Dirt Discovery

You'll need: waterproof table covering, jar with lid, spoon, dirt, pitcher of water, paper towels, and magnifying glass. Fill the jar halfway with dirt and then the rest of the way with water. Fill the jar on the lid tightly. Shake the jar for half a minute then let stand until the water/dirt settles into layers. Examine them, determine how many layers there are, which layer has the biggest particles, etc. You can skim off any particles floating in the water to set aside for study. Then carefully drain out the water, and scoop out the grains of the next layer onto a towel, and then the next, for examination with the magnifying glass. This project is especially fun if you have dirt from different areas and a book that explains different types of soil. Become a regular Sherlock Holmes!

Did you know that you can measure the movements in the earth's crust, called seismic waves, in your own home? Making a simple seismograph to demonstrate how these movements are measured is easy!

- Using wire and a sturdy ruler or stick, suspend a 2 liter plastic soda bottle filled with water above a table top, hanging between two stacks of heavy books. It should be suspended about 1" from the table surface.
- Underneath the bottle, tape a sheet of paper with a piece of aluminum foil to the table.
- Roll a pen (felt-tip works best) in a piece of paper and tape it. You'll want to leave the rolled paper loose enough that the pen can slide up and down.
- Tape the paper/pen roll to the bottle's side with the tip of the pen touching the paper.
- Shake the table gently at first, and then more vigorously.
- Examine the record of the "quake" now recorded on the piece of paper!

Web Picks

According to the www.sheppardsoftware.com/ the purpose and goal for Sheppard Software is:

- To add sound and visual effects to make learning fun and more memorable.
- To design games with many difficulty levels so that players will continue to be challenged no matter how far they progress.
- To provide games that will exercise players' brains."

With six amazing talented people behind the product, children are sure to enjoy learning while the educator will find more than enough science to fill each lesson!

Specific Earth Science studies may be accessed by typing in the search box the desired search criteria. However, the child may choose cells and biology, animals, planets, deep sea science, and seasons tabs for further study and game boxes which take the user into the specific science subject. Online quizzes, games, and projects with full color graphics will provide enrichment activities for the elementary through junior high school student.

Finally, a child may also discover new material each season such as winter science, autumn paint, spring things and jungle movies to the right on the www.sheppardsoftware.com home page.

Clicking on "Kid's Corner" will take a child to a favorite section with over 15 tabs with games for every science subject an inquisitive child will desire to explore.

Some Great Down-to-Earth Books!

J-EASY

Feeding Friendsies by Suzanne Bloom
Dave's Down-to-Earth Rock Shop by Stuart Murphy
Rocks! Rocks! Rocks! by Nancy Elizabeth Wallace
Compost Stew: An A to Z Recipe for the Earth by Mary McKenna Siddals
Over in the Ocean: In a Coral Reef by Marianne Berkes

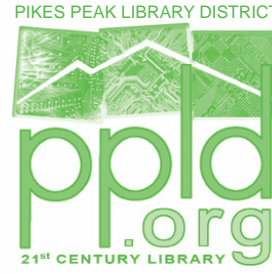
J-Nonfiction

J 551.135 S671E
Earth's Shifting Surface by Robert Snedden
 J 552.0078 O58P
A Project Guide to Rocks and Minerals by Claire O'Neil
 J 631.4078 F816J
Junior Scientists Experiment with Soil by Vicky Franchino
 J 631.4078 G228S
Super Science Projects about Earth's Soil and Water by Robert Gardner
 J 631.4 A453D
Different Kinds of Soil by Molly Aloian
 J 592.1776 C418S
Sea Soup: Zooplankton by Mary Cerullo

Teen Fiction

Ashen Winter by Mike Mullin
Life As We Knew It by Susan Beth Pfeffer
Empty by Suzanne Weyn
The Carbon Diaries 2015 by Saci Lloyd
Scat by Carl Hiaasen
 Nonfiction
 551.D587V
Violent Earth by Robert Robert
 551.B261H
The Handy Geology Answer Book by Patricia L. Barnes-Svarney
 557.88 M583
Messages in Stone: Colorado's Colorful Geology by Vincent Matthews
 560 E681A
Introduction to Fossils and Minerals: Seeking Clues to the Earth's Past by Jon Erickson
 560 L425D
Discover Nature in the Rocks: Things to Know and Things to Do by Rebecca Lawton

Tell us what you think! We welcome topical ideas to enhance your educational endeavors. Contact gsohns@ppld.org.



HOMESCHOOL CONNECTIONS
 An Educational Resource Tool Summer 2013

Earth Science is all around us

Summertime is a great time for homeschoolers to study a few of the many divisions of Earth Science. The weather is warm, the days are longer, and the opportunities to study Earth Science are endless.

Begin in your own backyard; soil science is the study of soil as a natural resource. Let kids dig* a hole and examine changes in the soil structure as they dig deeper. Can you see layers in the soil? Be sure to supervise digging children and keep them safe.

*Before digging, have your property flagged by your local utilities by calling 811.

Study hydrology, the science of water distribution and movement. Once your utility lines have been flagged, you may have an area that would be just right for digging and making a river channel, and seeing how river banks erode and how oxbow lakes form as a river moves over time. You could also visit Fountain Creek Regional Park to observe flowing water on a bigger scale, as well as see how flooding has washed away large sections of the park itself.

Warm evenings can allow for a more comfortable study of stars, constellations and planets. You should be able to see Mercury, Venus, Mars, Jupiter and Saturn this summer. Stardate.org is an excellent site for more information on topics in astronomy.

Dabble in meteorology. Learn basic cloud formations, and record rainfall for a month by reading a rain gauge at the same time each day. Cocorahs.org is an excellent source for citizen science weather information. CoCoRaHS provides online training on how to read a rain gauge, and offer, through free membership, a way your family can provide weather data from your home that can be used in the study of weather throughout the nation.

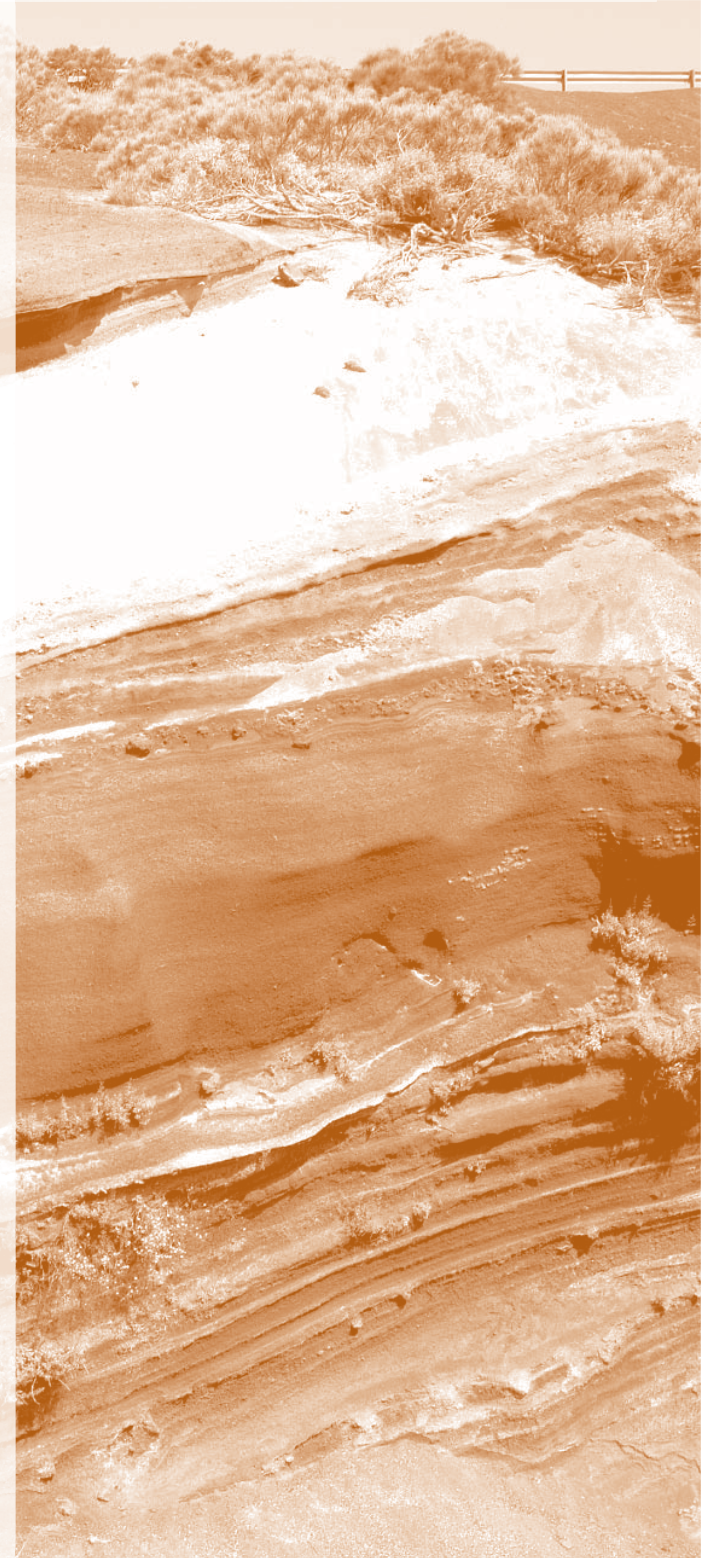
Geology is all around us in Colorado. Wherever your summer days take you, stop and look at the rocks or the mountainsides. With a little time and effort, you and your kids can learn to read some of the simple clues in the land around us.

Paleontology is another Earth Science subject that is available to study here in Colorado. The Dinosaur Resource Center in Woodland Park has a great assortment of fossils. Dinosaur Ridge in Morrison CO. offers the opportunity to see fossils and dinosaur footprints right where they were found. Both of these areas have fees.

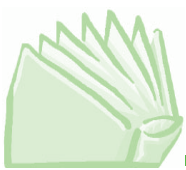
Volcanology is a bit trickier, although summertime is a great time to make that baking soda/vinegar volcano – outside! Should you drive up to Cripple Creek, you can see a very ancient caldera; the city is built inside this caldera. The ancient volcanoes are why gold is found in this part of the state.

Geography is more than just maps. By looking at maps, we can see how the surface of the earth impacted human settlement. Rivers, mountains, and access to arable lands are all reasons why people built cities in one area, and not another – this is the study of human geography.

Enjoy your summer studies in Earth Science!



To contact PPLD's Homeschool Committee, please email gsohns@ppld.org.



^{new} The BookShelf

– great new books for homeschoolers



Top Tips: Be the Best at Math by Rebecca Rissman (2013)

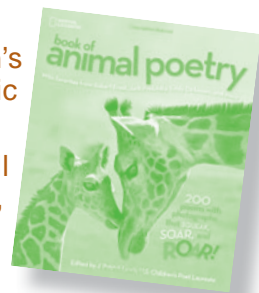
The Top Tips series has several great books on typical school topics. The Math book has a dozen hints for estimating, looking at a problem differently, and some shortcuts to answers. **The Top Tips: Be the Best at Writing** has easy to understand information about revision, different types of writing, using outlines and much more. **Top Tips: Be the Best at Science** explains complex science ideas in simple terms.

All three books: Reading level is 1st - 3rd; interest level is 3rd - 5th.

Book of Animal Poetry edited by J. Patrick Lewis, U.S. Children's Poet Laureate – National Geographic (2012)

Expect high quality photographs, all labeled with the precise animal name, and 200 poems about animals, from well known poets, traditional rhymes, and silly rhymes by Ogden Nash.

Ages 4 - 14; Literature – poetry; Science – naming animals.



Dear Hot Dog: Poems About Everyday Stuff by Mordicai Gerstein (2011)

The beauty of this book is the author/illustrator taking something as common as crayons, or socks and composing a poem on the topic. Forget being intimidated by poetry!

Ages 4 - 10; Literature – poetry

A Meal of the Stars: Poems Up and Down by Dana Jensen (2012)

The words of these poems are written one word per line, with no punctuation or capitalization. Where do they start? Either at the bottom of the page and read up, or at the top of the page, and read down – you and your children will have to try it one way, and then the other to find the correct set of words. This is another lovely book that makes poetry completely approachable and easy enough for anyone to imitate.

Ages 6 - 14; Literature – poetry



Pikes Peak Library District

Little-Known Secrets



WORLD BOOK

Are you looking for a great all-in-one resource for research projects? Looking for one source that works for a variety of grade levels, for a variety of learners, and is a trusted name? Look no further than World Book Online!

World Book Online: PPLD's World Book resource is divided into four separate resources.

World Book Online for Kids has easy to read articles and media resources for children, as well as a variety of learning resources, designed mainly for children ages 5 - 9. The site features articles, pictures, maps, and videos. There is a read-aloud function for the text as well as a translation feature.

World Book Online Info Finder is designed for elementary and middle school-aged researchers looking for resources for homework or research reports. Info Finder features more than 40,000 encyclopedia and reference articles. This is a great source for current events as the information is updated every 2 - 4 weeks in the case of recent developments.

World Book Discover is designed for middle school-aged students and above. It's the optimum tool for visual learners! The student can create fully customized timelines with their own images or images from World Book to create family trees, add personal events to historical ones, or create timelines of current events.

If you have a student that is doing a big project, the My Research portion of the site is a plus! All research on World Book Discover can be saved.

The How To Do Research section of World Book Discover is an excellent source for teaching reference skills: planning research, conducting research, evaluating sources, compiling and organizing data, etc.

World Book Online Reference Center is designed for high school aged researchers. In addition to World Book's encyclopedic content, there are several hundred thousand primary source documents and thousands of eBooks.

To access World Book Online, visit ppld.org and find Databases A-Z in the left-hand pane. Click on it and then enter World Book in the Search Databases field. Click on the blue link for World Book Online and your student will have a multitude of tools available to do quality research!

Homeschool Programs

FREE! Curriculum Swap

Revitalize your family's learning resources! Join us to exchange curriculum with other homeschooling families. This is a completely free event. No money will be exchanged. Please call 531-6333, x1403 or email gsohns@ppld.org if you plan to bring curriculum to swap so we can reserve a table for you. Hope to see you there!
Thu., June 27 ♦ 1:30 - 2:30 p.m. ♦ East Library

Homeschool Resource Fair

Come visit with local organizations and learn how they can help you educate your children. We'll have enrichment programs, scouting, lessons, field trip destinations, support groups, and other resources represented.
Fri., Aug. 9 ♦ 9 a.m. - noon ♦ East Library

Science Lab Orientation Meeting

Come to a brief orientation meeting about East Library's Homeschool Science Lab and then check out the Lab itself. You'll find out about the equipment we have available and what you can do in the lab with your children.
Fri., Aug. 30 ♦ 1 - 3 p.m. ♦ East Library



Other Events & Programs

Teens

Knitting Club

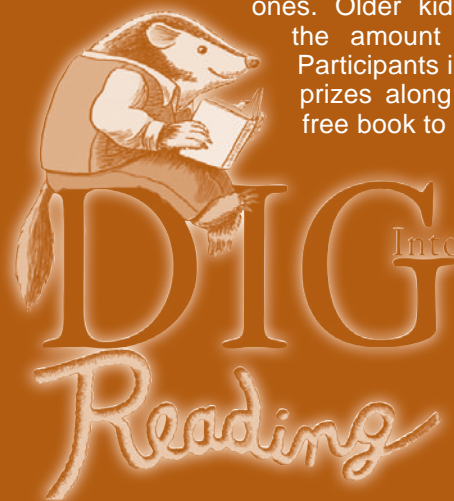
Join the Knitting Kninjas in the East Teen Center! Yarn and needles are available for practice, but please bring your own projects, too! Ages 12 - 18 only.
1st and 3rd Thursday every month ♦ 4 - 5 p.m.

Summer Reading Program

June 1 - August 31, 2013

Kids - Dig Into Reading

We have two reading programs for kids this year, Dig Into Reading for Babies and Toddlers (ages 0 - 2) and Dig Into Reading™ (ages 3 and up). For the younger children, parents will read and do some fun activities with their little ones. Older kids will keep track of the amount of time they read. Participants in both programs earn prizes along the way including a free book to take home!



Visit our Dig Into Reading website (we'll have this link soon) to register and find dates and locations of our fun summer programming.

Teens - Beneath the Surface

The teen summer reading program is open to anyone entering grades 5 - 12. Up for grabs are coupon books for free eats and games, books or journals, T-shirts, an eReader, wall climbing lessons, laser quest tickets, and more! Join other teens at your library and participate in many different programs being offered throughout the summer including movie nights, crafts, programs with Cheyenne Mountain Zoo, a writing contest, and more!



Visit the teen webpage (ppld.org/teens) for event times and locations and for online registration. Please keep in mind that some teen programs do require registration and may have age restrictions.

Would you like to be a Featured Family? Contact Gail at gsohns@ppld.org.

Home School Connections ♦ Summer 2013